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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,098	10/22/2003	Michael J. Wookey	30014200-1113	4762

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EXAMINER

PHAM, MICHAEL

ART UNIT	PAPER NUMBER
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2167

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/691,098

Applicant(s)

WOOKEY, MICHAEL J.

Examiner

Michael D. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/07 has been entered.

Claim Objections

2. It is noted that claim 14, appears to contain typos such as two periods and further that it appears the third limitation (lines 9-12, of claim 14) was meant to replace the second limitation (lines 6-8) of claim 14. In order to expedite the prosecution, this has been assumed.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims fail to place the invention squarely within one statutory class of invention. [0078] of U.S. Patent Application publication 200040230589 (i.e. USPTO publication of application), applicant has provided evidence that applicant intends the "medium" to include carrier waves. As such, the claim is drawn to a form of energy. Energy is not one of

the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefor not a composition of matter.

8. Claim 14 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were

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unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6021443 by Bracho et. al. (hereafter Bracho).

Claim 1:

A method in a data processing system having a program, the method comprising the steps of:

“providing a datatype having a metadata that describes a data and a reference to the data” (col. 2 l. 64-67 to col. 3 l. 1-5, describes event types. Hub data structure (metadata describes data). Hub data structure indicates which neighbor hub is on a least cost path between publisher and subscriber. Hence reference to data) “the data being maintained separately from the datatype” (c. 2 l. 13-15, publisher’s publish events (data). Subscribers subscribe to events (data types) that match criteria defined by subscriber.), “the metadata including a key that enables the datatype to be joined with other datatypes having the key in their respective metadata” (c. 2 l. 23-

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25, each subscriber is guaranteed to receive all events (datatypes to be joined with other datatypes) published on the system if, and only if, they match the subscription criteria (key specified by the subscriber.); and

“publishing the datatype” (abstract, published events), “a subscriber asynchronously receiving the datatype responsive to subscribing to the datatype” (col. 2 l. 19-23, publication and subscription are preformed asynchronously. The system receives published event from a publisher and routes the event to all appropriate subscribers), “subscribing to the other datatypes responsive to identifying the key in the received data type” (col. 5 l. 28-30, subscribers specify what they want based on an event type and on the content critieria) “and asynchronously receiving the other datatypes that have the key in their respective metadata responsive to subscribing to the other datatypes” (c. 5 l. 15-22, the publisher and subscriber operate asynchronously. Col. 2 l. 23-25, subscriber guaranteed to receive all events published on the system if and only if they match the subscription criteria specified by subscriber.).

Claim 2:

The method of claim 1, wherein the data is not published with the datatype (Col. 2 l. 23-25, all events published on the system if and only if they match the subscription criteria specified by subscriber.).

Claim 3:

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The method of claim 1, wherein the reference to the data is a pointer (figure 6B, pointer to subscription. Telling where certain events should be sent to (col. 11 l. 56-61)).

Claim 4:

The method of claim 1, further comprising the step of: registering the datatype (c. 10 l. 66, registered publications).

Claim 5:

The method of claim 1, further comprising the step of: registering the key (c. 11 lines 24-25, subscriber registering a subscription).

Claim 6:

The method of claim 1, wherein the metadata includes a plurality of different keys (col. 3 l. 1-5, data structure created by the hub in accordance with subscriptions of the system).

Claims 7-12:

Claims 7-12 are rejected for similar reasons as claims 1-6 respectively.

Claim 13:

A data processing system comprising:

 a memory having a program that:

provides a datatype having a metadata that describes a data and a reference to the data, the data being maintained separately from the datatype, the metadata including a key that enables the datatype to be joined with other datatypes having the key in their respective metadata, and publishes the datatype, a subscriber asynchronously receiving the datatype responsive to subscribing to the datatype, subscribing to the other datatypes responsive to identifying the key in the received datatype, and asynchronously receiving the other datatypes that have the key in their respective metadata responsive to subscribing to the other datatypes;

“providing a datatype having a metadata that describes a data and a reference to the data” (col. 2 l. 64-67 to col. 3 l. 1-5, describes event types. Hub data structure (metadata describes data). Hub data structure indicates which neighbor hub is on a least cost path between publisher and subscriber. Hence reference to data) “the data being maintained separately from the datatype” (c. 2 l. 13-15, publisher’s publish events (data). Subscribers subscribe to events (data types) that match criteria defined by subscriber.), “the metadata including a key that enables the datatype to be joined with other datatypes having the key in their respective metadata” (c. 2 l. 23-25, each subscriber is guaranteed to receive all events (datatypes to be joined with other datatypes) published on the system if, and only if, they match the subscription criteria (key) specified by the subscriber.); and

“publishes the datatype” (abstract, published events), “a subscriber asynchronously receiving the datatype responsive to subscribing to the datatype” (col. 2 l. 19-23, publication and subscription are preformed asynchronously. The system receives published event from a publisher and routes the event to all appropriate subscribers), “subscribing to the other datatypes

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responsive to identifying the key in the received data type” (col. 5 l. 28-30, subscribers specify what they want based on an event type and on the content criteria) “and asynchronously receiving the other datatypes that have the key in their respective metadata responsive to subscribing to the other datatypes” (c. 5 l. 15-22, the publisher and subscriber operate asynchronously. Col. 2 l. 23-25, subscriber guaranteed to receive all events published on the system if and only if they match the subscription criteria specified by subscriber.); and

“a processing unit that runs the program” (col. 4 l. 65-67, executed by a processor of the computer in which the software is stored)

Claim 14:

Claim 14 is rejected for similar reasons as claim 1.

Response to Arguments

11. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

A. Applicant's asserted that Bracho still fails to disclose or suggest a subscriber that asynchronously receives a datatype responsive to subscribing to the datatype, subscribes to other datatypes having a key responsive to identifying the key in the received datatype, and asynchronously receives the other datatypes that have the key in their respective metadata responsive to subscribing to the other datatypes.

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In response, the examiner respectfully disagrees with Applicant's assertions. A key by definition is a mere means of access, control or possession (American heritage dictionary 4th edition). In this case Bracho col. 2 lines 19-26, provides subscriber subscription criteria as stated above in order to match subscriptions of events published on the system. If and only if there is a match; is the user given access, control or possession of the published event. The publications and subscriptions are performed asynchronously, and the subscribers receive events. Hence, Bracho discloses asynchronously receives a datatype (subscription/event) responsive to subscribing to the datatype (user specified subscription criteria), subscribes to other datatypes having a key responsive to identifying the key in the received datatypes (receives all eventS published on the system if and only if they match the subscription criteria), and asynchronously receives the other datatypes that have the key in their respective metadata responsive to subscribing to the other datatypes (receives all eventS published on the system if and only if they match the subscription criteria). Accordingly, claims as written are anticipated by the prior art.

Conclusion

12. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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